

## DOCUMENT RESUME

ED 304 852

EC 212 547

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TITLE 400 Systems Later: Outcomes of the Pennsylvania Project.  
INSTITUTION Pennsylvania Assistive Device Center, Harrisburg.  
PUB DATE 25 Oct 88  
NOTE 16p.; Paper presented at the Biennial Conference of the International Society for Augmentative and Alternative Communication (Anaheim, CA, October 23-26, 1988).  
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Assistive Devices (for Disabled); \*Communication Aids (for Disabled); \*Communication Disorders; Computer Assisted Instruction; \*Electronic Equipment; Elementary Secondary Education; \*Program Development; \*Severe Disabilities  
IDENTIFIERS \*Augmentative Communication Systems; \*Loan Programs; Pennsylvania

## ABSTRACT

A program was developed to provide long-term loans of high technology equipment to severely handicapped students who require such assistance to meet educational goals. Coordinated by the Pennsylvania Special Education Assistive Device Center (ADC), the program enables handicapped students to communicate, to access computers for instruction, and to utilize written expression. The program also enables educators to gain expertise in assessment of students and in capabilities of technology systems. Short-term loans are also available for many of the more popular devices, to allow the student to experience the devices on a trial basis. Included are a list of ADC services, a description of the program's management structure, procedures for long-term loan, a form to request a videotape titled "Guidelines for Assessment and Evaluation of Students with Augmentative and Alternative Communication Needs," and various charts. (JDD)

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## 400 SYSTEMS LATER: Outcomes of the Pennsylvania Project

*presented by*

The Pennsylvania Assistive Device Center

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International Society for  
Augmentative and Alternative Communication  
1988 Biennial Conference  
Anaheim, California  
October 23-26, 1988

October 25, 1988  
3:30-5:00 PM  
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## OUTLINE

- I. Introduction**
  - A. Geography
  - B. Purpose
  - C. History
  - D. Staff
  - E. Services
- II. Long Term Loan Program**
  - A. Purpose
  - B. History
  - C. Service Delivery
  - D. Local Augmentative Specialists
  - E. Support Services
  - F. Loan Process
- III. Assessment**
  - A. Philosophy
  - B. Team Approach
  - C. Environmentally-based
  - D. Local Augmentative Specialists
  - E. Ten-step Process
  - F. LAS Kit
  - G. Assessment Workshops & Training Videotapes
  - H. Efficacy and Implications
    - 1. Flexibility
    - 2. Customizations
    - 3. Time
    - 4. Costs
    - 5. Problems
- IV. Analysis of Program**
  - A. Number of students, cost augmentative
  - B. Four-year cycles
  - C. Demographics
    - 1. Ages
    - 2. Disabilities
    - 3. Geography
  - D. Equipment
  - E. Areas of Concern
- V. Realistic View**
  - A. Trend
  - B. Six-year Plan
- VI. Summary**
  - A. Problems and Solutions
    - 1. Turn-over Among Professionals
    - 2. "Specialis-:" Training
    - 3. Seating and Positioning Inadequacies
    - 4. Transition Services After 21 Years
    - 5. Interagency Cooperation
  - B. Analysis
    - 1. Large Student Population: User's Day
    - 2. Communication Competency
    - 3. Trained Professionals
    - 4. Long-term Effects

# **ADC SERVICES**

## **A) PRINT RESOURCES**

- ASSISTIVE DEVICE NEWS
- FACT SHEETS
- TECHNICAL BULLETINS
- LIBRARY

## **B) TRAINING MATERIALS**

- SOFTWARE
- TRAINING VIDEOTAPE
- ASSESSMENT KITS

## **C) CONSULTATION**

- TOLL-FREE HOTLINE
- SITE VISITS

## **D) TRAINING**

- STATE & REGIONAL/LOCAL PROGRAMS
- LOCAL AUGMENTATIVE SPECIALIST

## **E) REFERRAL SERVICES**

- SERVICE DATABASE
- NETWORKING

## **F) CLINICAL SERVICES**

## **G) HARDWARE LOAN PROGRAMS**

- SHORT TERM LOANS
- LONG TERM LOANS

## **Maintaining Short- and Long-Term Loan Programs for Assistive Devices**

**Colleen A. Haney, M.Ed., CCC/SLP  
Pennsylvania Assistive Device Center**

### **Program Summary**

#### **The Pennsylvania Assistive Device Loan Program:**

##### **Long Term Loan**

The purpose of this program is to obtain appropriate high technology equipment for those severely handicapped students who require such assistance to meet educational goals. Coordinated by the Pennsylvania Special Education Assistive Device Center, this program, via assistive device technology, enables handicapped students to communicate, to access computers for instruction, and to utilize written expression.

Professional education staff who served one or more students with handicaps were eligible to apply for an assistive device loan. Applications from each IU geographical area were reviewed and ranked by Assistive Device Center staff. Grants were funded based upon child count; devices, therefore, were able to be awarded throughout Pennsylvania.

The rationale for developing this long-term loan program stems not only from educators' needs to gain information and ideas about technology applications for their students, but also from educators' needs to have systems available for daily classroom use. This requires expertise in assessment of students and in capabilities of technology systems. To adequately identify equipment which will meet a student's needs, the educator must be aware of existing available technology, how the system functions, and how readily the device can be applied to meet the student's needs. Such an endeavor requires technical and interdisciplinary assistance, which is not always available in the immediate environment.

The assistive device loan program offers many features which take into account the student's needs, the educator's concerns, and the state of the art of educational and augmentative communication technology. It is a unique

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approach to the issues of cost effectiveness, equipment obsolescence, and technical expertise which have, at times, confounded efforts to apply assistive device technology meaningfully.

Each assistive device loaned to the LEA is designated primarily for the use of an individual student. In addition to use in the classroom, the loaned system is available for student use at home and over school holidays. The device will follow the student should the student transfer to another classroom or to another LEA within Pennsylvania.

### **Short-Term Loan**

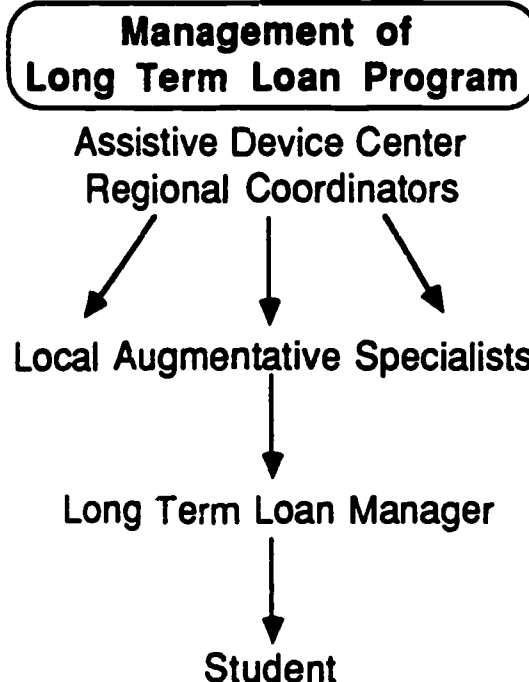
A key element of the ADC-developed assessment process suggests that the student should have the opportunity for a "trial run" or trial period with the augmentative communication device being recommended. To facilitate this, the ADC has made available many of the more popular devices for a three-week period. These short-term loans are shipped UPS in specially-designed packing cases. Broker Attache cases and created foam cutout areas protect the components of the devices during shipping. The cases also provide protection for the devices being carried to and from school, and ensure ease of handling and locating components by the busy itinerant therapists. Also included are three different levels of operational tutorials (beginning, intermediate and advanced) developed by the ADC for the major devices.

## Long Term Loan Program

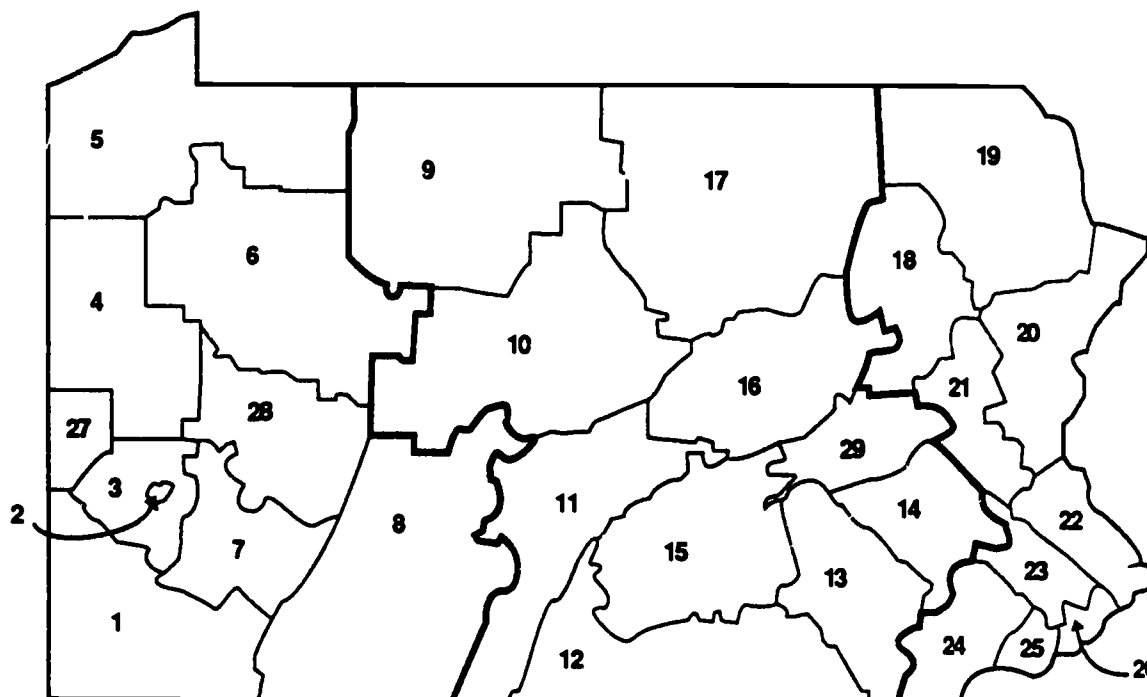
### **History:**

Winter 1984	Assistive Device Center (ADC) began as Resource Center, Library of Information
Spring 1985	Needs Assessment Survey to all Pennsylvania Administrators and Supervisors of Special Education
Summer 1985	Pennsylvania Department of Special Education responds to need by allocating \$500,000 for devices: Long Term Loan Program
Fall 1985	Awareness and Training Workshops for Professionals
Spring 1986	First Long Term Loan Cycle: 132 devices, \$500,000
Fall 1986	Second Long Term Loan Cycle: 153 devices, \$500,000
Fall 1987	Third Long Term Loan Cycle: 121 devices, \$500,000
Fall 1988	Fourth Long Term Loan Cycle: * devices, \$500,000

\* Pending



Three Assistive Device Center (ADC) staff members serve as regional coordinators of the Long Term Loan Program. Pennsylvania is divided into 29 Intermediate Units. (The Intermediate Unit is defined as the middle echelon of a three-echelon state education system, school district, IU, and State Education Department which provides consultive, advisory, or education program services to school districts. The function of the IU is to provide ancillary services necessary to improve the state system of education. Intermediate unit programs are developed according to the needs of the school districts served by the units.) These Intermediate Units are divided into three regions: West, East and Central.



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Local Augmentative Specialists (LAS) were appointed by the Intermediate Units to be trained by the ADC and to serve as liaison professional support personnel to the ADC. The Local Augmentative Specialists are the first line of resource information or assistance for the long term loan managers, direct service providers or facilitators of the Augmentative Communication equipment. The long term managers are the professionals directly responsible for implementation and facilitation of the Augmentative Communication equipment. They are responsible for the day to day operation and facilitation of the Augmentative Communication Program.

**ADC Support Services to Local Augmentative Specialist and Long Term Managers:**

1. Long Term and Short Term Loan Program
2. Printed Materials, fact sheets, tutorials
3. Toll-free Hot Line Phone Service
4. Assessment Training
5. Local Augmentative Specialist Kit/Tools
6. Local Augmentative Specialist Network
7. Videotape Training Materials
8. Specialized Training Workshops
9. ADC Newsletter and Users Network
10. Educational Modules
11. Site Visits and Consultations
12. Augmentative Communication Profile; data collection
13. Equipment Exchanges

## Long Term Loan Procedure

1. Child referred to Local Augmentative Specialist Team as Candidate for Augmentative and Alternative Assistive Communication.
2. Local Augmentative Specialists Team begin assessment process.
3. Evaluation of Assessment Information.
4. Augmentative and Alternative Communication training begins in combination with "trial run" of equipment from short term loan program.
5. Completion of Long Term Loan Application.
6. Long Term Loan Application sent to Assistive Device Center.
7. ADC staff reads, evaluates and ranks Loan Applications by geographic educational areas.
8. Assistive Device Center funds approved applications.
9. Equipment is ordered.
10. Equipment is inventoried by ADC and sent to long term loan managers.
11. ADC Training Workshops for LTL Managers.
12. Students receive equipment.
13. Assistive Device Center monitors student progress and equipment use.
  - A. Site visits
  - B. Phone consultations
  - C. Upgrades/Exchanges/Additions
  - D. Augmentative Communication Profile

## Videotape Request Form

Title: "Guidelines for Assessment and Evaluation of Students with  
Augmentative and Alternative Communication Needs

Time: 70 minutes

This video follows three children through the assessment and evaluation process to determine what types of communication systems would be helpful for them. Both assessment and evaluation are referred to as part of a process rather than specific techniques. In assessment, facts are gathered and in evaluation, the information is interpreted.

The importance of interdisciplinary techniques are stressed. The most appropriate assessment occurs when local therapists and teachers work with the child in his/her natural environment.

Through this video, the following ten steps in the assessment/evaluation process are illustrated:

1. Identification of the students needs
2. Gather background information on the student
3. Interview family & staff
4. Interview and observe student in a natural environment
5. Motor assessment
6. Language assessment
7. Matching the student's needs to specific equipment's features
8. Mock up/trial run
9. Evaluation of Results
10. Follow along / Communication competency

The video stresses that assessment should not take place in isolation.

As a result of the assessment phase, a list should be made of the child's characteristics focusing on the whole child and his/her other methods of communication. A total Communication program, aided and unaided, is planned for the child. If technology is to be considered, the list of the child's characteristics may be matched to product descriptions. After a trial period, the technology or systems selected should be evaluated to determine their appropriateness to the total system for the child.

\*\*\*\*\*

\_\_\_\_\_ Guidelines for Assessment and Evaluation of Students with  
Augmentative and Alternative Communication Needs (1987)

I have enclosed a blank T120 videocassette for each tape requested. Please send the video tapes to:

Name: \_\_\_\_\_

Facility: \_\_\_\_\_ Phone: (\_\_\_\_\_) \_\_\_\_\_

Street: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Return this form and blank T120 videocassette(s) to:

Central SERRC  
ATTN: Kay Dively  
150 South Progress Avenue  
Harrisburg, PA 17109

ISAAC Conference 1988

Colleen A. Haney, M.Ed., CCC/SLP

Student Total: 406

CYCLE I	132	CYCLE III	121
CYCLE II	153	CYCLE IV	?

Average Cost: \$4096.00  
Most expensive request: \$10,865.70

Ages:

The student population ranges from 22 years to the youngest of three years.

18 to 22 years	19%
12 through 17 years	31%
3 through 11 years	50%

Diagnosis:

A review of the medical diagnoses of the Pennsylvania population indicated 60% of the students have multiple disabilities involving cerebral palsy.

\*50% of the students have cerebral palsy.

\*20% of the students have cerebral palsy and mental retardation.

Mental retardation accounts for 20% of the students' need for augmentative communication.

A variety of medical conditions comprise the remaining 10%:

Medical Condition/Diagnosis

Alexanders Disease	Spinal/Cord injury
Basal Ganglion Disease	Autism
Apraxia	Stroke
Lesch-Nyhan	Dystonia
Moebius Syndrome	Multiple Congenital
Learning Disabilities	Anomalies
Brain Injury	Cleft Palate
Head Trauma	Porencephalic Cyst
Muscular Dystrophy	Ataxia Telangiectasia
Visually Impaired	Hearing Impaired

The majority of students, 77%, are non-ambulatory. Students with the ability to ambulate, including students using walkers, comprised 23% of the group.

Educational Placement:

Student's placement in educational program consisted of:

- \*integrated environments: 25%
- \*homebound instruction due to medical reasons: 2%
- \*special education centers, private special education facilities and residential facilities: 30%
- \*self-contained special education classes within regular education environments: 43%

## **REALISTIC VIFW: TREND**

- 1. ASSESSMENT/TRIAL RUN/  
RECOMMENDATION/SECURE  
SYSTEM**
- 2. EQUIPMENT TRAINING**
- 3. SEATING/MOUNTING/  
POSITIONING**
- 4. VOCABULARY SELECTION/  
COMMUNICATION  
ENVIRONMENTS**
- 5. INTERACTIONAL  
DEVELOPMENT/INTEGRATION  
OF "TOTAL COMMUNICATION"**
- 6. BEGINNING STAGES OF  
COMMUNICATIVE  
COMPETENCY**

## SIX YEAR PLAN

YEAR	1	2		3	4		5	6
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### Assessment Process

### Training of the Tool

### Communication Competency

STL - Output Needs  
       - Input Capabilities

- Access speed  
       Accuracy

- Conversation

Funding Sources

Seating

Positioning

- Programming  
 - Peripherals  
 - Interfacing

- Academics

Vocabulary Selection Graphics  
 Communication Environments  
 Graphics Arrangements  
 (Visual Displays)

Evaluation of Communication Behaviors:

Imitation

Turn-taking

Interaction

Repair Strategies

Topic Maintenance

## APPENDIX

\_\_\_\_\_ LAS Kit Materials, Cost and Addresses

\_\_\_\_\_ Assessment Forms

\_\_\_\_\_ Long Term Loan Application

\_\_\_\_\_ Videotape Request Form

\_\_\_\_\_ Augmentative Communication Profile

\_\_\_\_\_ Site Visit Evaluation

\_\_\_\_\_ Mailing List Request

\*\*\*\*\*

*Please send me the materials as checked above.*

Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

RETURN TO: Colleen Haney, M.Ed., CCC/SLP  
Augmentative Communication Specialist/Speech Pathologist  
Pennsylvania Assistive Device Center  
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Harrisburg, PA 17109-4698

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